THE NATURE OF MENTAL DEFICIENCY.

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It is these variations in degree and type of defect which give rise to the different classes of defectives defined by law. It will readily be seen, however, that the permutations and combinations which may occur are almost without limit. Hence there is no hard and sharp line of demarcation, either between the different grades of defect, or between mental defectives and the normal. The one passes into the other by insensible gradations. It thus results that the separation of defectives into different classes is largely arbitrary and artificial, and that, whilst the diagnosis of the lower grades is a matter of comparative ease, that of the highest grades may be attended with the greatest difficulty. However, apart from individuals on the borderland, either of the different grades of defect or of the normal, the bulk of those in the four classes of defectives do present certain tolerably well-defined characteristics which will be briefly described.

Idiots are the lowest grade of defectives. They are characterized by such a profound defect of adaptation that they are unable to
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understand the relationship between simple causes and their effects. For instance, they do not appreciate that fire will burn, water drown, or sharp tools inflict serious injury. Even if they possess the primitive instinct of self-preservation, this want of perception prevents them from protecting themselves against common physical dangers. They are incapable of learning to speak, or of any form of scholastic education. They cannot perform any kind of work. They require to be washed, dressed, and looked after all their lives like little children.

*Imbeciles* are less defective. They have sufficient understanding to protect themselves from ordinary physical dangers. They can understand language, and can carry on a simple conversation. They can be taught to read and write two- and three-letter words, and to add small units. They require supervision in washing and dressing. They can be trained to perform simple routine tasks, but they cannot undertake any remunerative employment. They are defined by the Act as "incapable of managing themselves or their affairs." This is true, but it is a misleading definition which does not at all adequately describe the marked deficiency of imbeciles.

The *feeble-minded* are the mildest grade of defectives, and they are by far the most important class, for the following reasons: They are the most numerous; for every idiot there are approximately three imbeciles and fifteen feeble-minded. The fact that they suffer from a comparatively mild degree of defect causes them to have considerably greater potentialities both for good and for evil, and this entails important social consequences. As a class they are markedly superior to the imbeciles in scholastic educability and capacity for work. They can be taught to read and write, and to do simple calculations in mental arithmetic. They acquire a fair range of school and general knowledge, and most of them, if provided with a suitable occupation and afforded a little supervision, can earn wages which will pay for, or contribute materially to, their keep. In spite of this superiority, a careful mental investigation will usually reveal such a definite defect of common sense as to leave no doubt regarding them. But there are persons suffering from such a mild degree of defect that their diagnosis may be a matter of considerable difficulty, and it is necessary to describe these in greater detail.

Many of these high-grade feeble-minded have been educated in ordinary schools, and although inquiry will show that the majority of them have been behind the average standard for their years, when they are seen as adolescents or young adults they present no very obvious educational failing. Their range of general information is not markedly inferior to that of their social compers. They have a good appreciation of their surroundings and they converse intelligently upon ordinary topics. In fact they look, and talk, and apparently behave, like normal persons. As a consequence they seem to be, and actually are, far removed from the concept of mental deficiency which formerly obtained, and which still exists in many quarters. And yet, when the life history of these persons is investigated, it is found to be one long record of inefficiency or failure. Some of them may have been provided with a suitable form of occupation in which they can earn enough money for their keep; but they cannot lay out the money they earn so as to provide for themselves without outside help. Should they lose their situations, they are rarely able of themselves to get another. If any change takes place in their circumstances they are unequal to the adaptation necessary to meet it. Those whose parents are well-to-do are tried at occupation after occupation, but they cannot make good. Eventually they are usually shipped off to a farm in one of the colonies, or some rural clergyman is found who, for a consideration, allows them to assist with his poultry or garden. In short, it is quite clear that they cannot fend for themselves, and that they are in need of some special environment
and some amount of care and supervision, if they are not to come to grief.

The class I have just described, apart from their inefficiency, give no trouble. They are well-behaved and good-tempered; and although there is clearly some defect, their mental equilibrium is stable. There is another class, however, which I have termed the unstable type, who are markedly different, and in whom the outstanding characteristic is excessive emotional reaction. On the slightest provocation, or often without any provocation at all, they fly into a violent rage in which they will not hesitate to assault those about them, or to commit some destructive act. Anger, contrition, jealousy, revenge, elation, depression, overwhelm their minds in succession, with the rapidity of the turn of a kaleidoscope. They invent imaginary experiences and recount them as actual facts; they make unfounded charges; they quarrel with everyone who has to do with them, and their whole conduct is so fickle and undependable that no one will employ them. The term "temperamental" defective has been applied to this type, and it has been suggested that their condition is purely one of excessive emotionality. But I cannot subscribe to this view, for I cannot see how the excess of a function can constitute mental defect. It appears to me that the excessive display of emotion is in reality due to a defect of general control, and that in most, if not all, of these persons this defect of control is merely an additional complication which is superadded to defects similar to those which exist in the stable type. I therefore prefer to call them the unstable type of feeble-minded.

Now whilst the life history of these high-grade feeble-minded persons, of either the stable or unstable type, clearly shows that they are in some way defective and in need of care and supervision, either for their own protection or for the protection of others, it is nevertheless equally clear that the step which separates them from the lower stratum of the community, from the hewers of wood and from the drawers of water, is a very slight one. Of what then does the difference consist?—what is the nature of their defect? It is this. The lowest stratum of the normal, illiterate though they may be, have enough common sense to manage themselves and their affairs without outside help. They make mistakes, but they profit by the experience and do not repeat them. Their ability is limited, but they have some ability to adapt themselves to conditions outside their previous experience. They may not be able to look a long way ahead, but they can look far enough for their needs. They can make plans for their future, and they can co-ordinate and direct their conduct so as to achieve these plans. The feeble-minded are lacking in these aptitudes. In one person it may be judgment that is chiefly at fault, in another prevision, in another general control, and so on. All of them, however, are defective in some way or other in that group of mental factors which is essential for efficient adaptation to the exigencies of life, and is conveniently termed "wisdom" or "common sense." The lack of this, which can usually be demonstrated by appropriate tests and careful investigation, necessitates care, control or supervision, and brings them within the meaning of the Act.

The fourth and last class of defectives specified by the Act are the moral defectives. They are defined as "persons in whose case there exists mental defectiveness, coupled with strongly vicious or criminal propensities, and who require care, supervision and control for the protection of others."

I do not propose to give any detailed account of these persons for the reason that, although they are a very important class, they are an exceedingly small one. It will be enough to say that moral defectives, from the psychological aspect, are characterized by three main conditions. These are: (1) A defect of wisdom similar to that which marks all high-grade aments. (2) A defect of moral and social sentiment which
results in them being devoid of any of those altruistic feelings which play such an important part in the inhibition of primitive instincts and the regulation of conduct. (3) The presence of strongly pronounced instinctive tendencies of the purely self-seeking order. The net result of this combination is to give rise to an individual whose whole life is one of senseless misdoing, and who is as devoid of shame as he is of sense.

Having now attempted to describe the nature of mental deficiency from the psychological aspect, it remains to consider two other terms of the statutory definition; namely, that the arrested or incomplete development of mind must have been in existence before the age of 18 years, and that it must either arise from inherent causes or be induced by disease or injury.

The development of mind is dependent upon two factors: (1) A potentiality for development inherent in the germ cell, and (2) external factors of the environment which operate to favour or thwart the realization of this potentiality. If the inherent potentiality is normal, and if there are no unfavourable external factors, then the development of mind proceeds stage by stage until it is complete. At birth practically the only mental processes which exist are certain organic instincts, such, for instance, as those of sucking, and grasping, together with a general appreciation of the comfort or discomfort of surroundings. Presently the special senses come into being, and these admit of the formation of percepts. Later, with the increased development of attention, memory and association processes, simple concepts become possible. When this stage is reached, the child becomes capable of making discriminations and comparisons, and of forming simple judgments. The gradual acquirement of knowledge, the new experiences of each day, the necessity for checking instinctive tendencies in order that some project may be attained or some unpleasant consequence averted, all combine to favour the development of the intellectual processes, and to render the individual more and more capable of adapting his conduct to the demands of his surroundings. The highest and latest development of all is that of the sentiments, such as those of right and wrong, of honour, honesty, and of social and moral obligation. With the acquirement of these mental development becomes complete, and the individual is fully equipped to maintain an independent existence in a well-ordered and law-abiding community.

This short account is, of course, the barest possible outline; but it will probably suffice to render intelligible two points which it is necessary to emphasize. The first of these is that mental development proceeds in the normal person by gradual and orderly steps. The second is that this individual development is a recapitulation of the successive stages through which the race has passed. During the early months and years of life, although the intellectual processes are gradually coming into being, the behaviour of the child is largely dictated by his instincts and emotions. He is essentially egoistic. About the fifth and sixth years of life the normally constituted child, who has been brought up in favourable surroundings, has usually attained sufficient intellectual development to cause a change in the type of his behaviour. He no longer acts at the blind behest of emotion and instinct, but has acquired a measure of control. Instinctive behaviour tends to be replaced by discriminating and rational behaviour. From this time onwards, although instincts still serve as powerful incentives, as they do in fact throughout the whole of life, the intellectual processes become more and more capable of restraining their manifestations within the bounds prescribed by the laws, manners and customs of the society in which he lives. Coincident with this, there is gradually acquired a greater range of knowledge, an increased capacity to discriminate, reason, plan, learn.
from experience, and generally to co-ordinate and control conduct so as to achieve ideals and remote ends.

It is not possible to say precisely at what age this development of mind reaches completion, and undoubtedly there are individual differences. It is now generally agreed, however, that in the great majority of individuals development is complete between the sixteenth and eighteenth years of life. In saying this I do not suggest that no further improvement takes place in mind after this age, or that the mental capacity of the youth of 18 years is equal to that of the mature individual of 45. Clearly this is not the case. What is meant is that by the age of 18 or thereabouts, the normal individual is in possession of all the processes of mind, and that they are sufficiently developed to admit of independent social adaptation. With further years he undoubtedly acquires more knowledge and experience. He is capable of a wider outlook, his judgment becomes more sound, and his general mental capacity greater. But no new mental processes are acquired; the architecture of mind is complete by about the eighteenth year. To descend to a very materialistic metaphor, we may say that by this age the normal individual is equipped with a full set of mental tools, and that further years merely add to his skill in using them.

It is for this reason that the definition specifies that the defect of mind should have existed before the age of 18 years. Any mental disability sufficient to necessitate supervision or control which supervenes after this age is not arrested or incomplete development, but some form of disorder or decay. These are not amentia, and they are not intended to be included within the Mental Deficiency Act.

It has been said that mental growth is the resultant of two sets of factors, intrinsic and extrinsic. There are some points regarding these to which it is necessary to refer. The factor of chief importance is the intrinsic one: that is, the developmental potentiality, or impetus, inherent in the germ cell. There is no doubt that the amount of this varies very considerably in different individuals; and the great majority of mental defectives, probably as many as four-fifths of the total number, owe their condition to an impaired developmental potential. They are consequently termed "primary aments." This impetus to development may be so inadequate as to result in deficiencies of the body which are incompatible with life. In aments the failure is less generalized than this and chiefly affects the architecture of mind, although many aments show indications of bodily imperfection also. A marked inadequacy of potential results in idiocy and imbecility; a less severe defect results in the various grades of feeble-mindedness. In idiocy and imbecility even the foundations of mind are not well and truly laid, and the condition is apparent in the early months of life. At the other extreme, that is, the high-grade feeble-minded, the developmental impetus has been sufficient for the growth of all but the highest controlling processes of mind; and in such cases it may be not until adolescence, that is, until the age at which these processes are normally evolved, that the deficiency becomes manifest. When this occurs, the individual may not show any serious abnormality until he is required to take the responsibilities of life upon his own shoulders. His defect then stands revealed.

But even if the developmental potential of the germ cell be perfectly normal, arrest of mental growth may be brought about by factors of the environment which result in injury or disease to the growing brain. Although these will produce the greatest effect during the period of most rapid brain growth, that is, from the time of fertilization to the third year of life, it is clearly possible for them to arrest development, and produce mental deficiency, at any age before development is complete. In the Act of 1913 no specific reference was made to these causes, and hence it was often assumed that mental
defect arising in this way, especially after early childhood, did not come within the scope of the Act. The new definition makes it quite clear that they are included. The number of cases so arising is undoubtedly very considerable; but as most of the children so affected die in the early years of life, their relative proportion is greatly reduced. If defectives of all ages be considered, cases of this kind, which are termed secondary amentia, probably amount to about one-fourth of the total. I do not propose to discuss these factors in detail. It will be enough to say that they may be conveniently divided into three groups, namely, those incident before, during, and after birth. During birth the chief factor is some form of injury; whilst before and after birth toxic processes of some kind or other predominate.

In conclusion, the essential concept to keep clearly in mind is this: That the legal criterion of mental deficiency is social incapacity of such degree and kind as to necessitate care, supervision and control. If this incapacity is due to any imperfection of mental development, of no matter what kind, so long as it has existed before the age of 18 years, then the individual is a mental defective within the meaning of the Act.

THE "HYSTERICAL" BREAST.

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Gentlemen,—I address you to-day on a small part of a very large subject, namely that of hysteria. Hysteria, as you know, is a condition where the body and to a certain extent the will become subordinated to the mind, and if the mind is unsound the body can suffer in various ways.

The relation between hysteria and the organs of generation was recognized of old and is reflected in the name of the condition. The breasts being organs of sex, naturally sometimes share in the changes which are characteristic of this disease; there has, however, been little importance attached to these manifestations.

As long ago as 1667 Willis noted pain, tenderness, and swelling of the breast accompanying hysterical manifestations. Sir Astley Cooper at the beginning of last century and Sir Benjamin Brodie in the middle of last century drew attention to the condition.

The hysterical condition is seldom limited to the breasts, but is usually part of more general manifestations affecting the whole body. Most patients with well-marked hysteria will be found to have tender breasts; it is only in those patients where the symptoms relating to the breasts overshadow the other symptoms that the term hysterical breasts can be applied.

Hysterical manifestations may be met with in young people of a neurotic tendency if undue attention is suddenly directed to the breasts and a strong impression is made upon their minds; often this is the result of ignorance or fear on their part. What strikes their mind may be a very simple thing, such as inequality in the size of the breasts which has been pointed out to them for the first time, a thing of really no importance. The same thing will happen if these patients come into contact with an older person suffering from cancer of the breast.

The chief characteristics are pain and tenderness in the breast extending to the side, the axilla, and down the arm of the same side.

The patient herself usually considers the breast to be acutely and exquisitely tender, and shrinks from allowing it to be touched or examined in the manner often met with in hysterical people, and yet if her attention is occupied or directed elsewhere the breast can be handled without eliciting any tenderness whatever.

Physical changes have been described such as swelling or changes of colour in the